

REMARKS

Applicants respectfully request reconsideration of this Application in view of the above Amendment and the following remarks.

Applicants have amended Claims 1, 4, 7, 12, 13, and 39.

Claims 1, 4, 7, 12, 13, and 39 have been amended to clarify that, when the AGIIS is isolated from a mixture of sulfuric acid and calcium hydroxide, the mole ratio of calcium hydroxide to sulfuric acid in AGIIS ranges from about 0.1 to about 0.5. Support for this amendment can be found in the Specification at Page 16, line 11 and line 14; Page 30, line 4; Page 31, line 15; and Page 32, line 22; and Claim 10 (now cancelled).

Pending in the application are Claims 1, 4 – 9, 11 – 13, 39 – 41, and 79.

I. Rejections Under 35 U.S.C. §112, first paragraph

Claims 1, 4 – 9, 11 – 13, 39 – 41, and 79 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. The Examiner asserts that the calcium hydroxide to sulfuric acid mole ratio range of “less than 0.5” includes values outside of the disclosed ranges.

Applicants respectfully assert that the claims have been amended above to recite that the mole ratio of calcium hydroxide to sulfuric acid “ranges from about 0.1 to about 0.5.” As the Examiner has noted, this ratio range was recited in cancelled Claim 10. This range is also supported by several examples throughout the specification, as noted above. For these reasons, the claims which recite a mole ratio range of “from about 0.1 to about 0.5” comply with the written description requirement.

II. Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 1, 4 – 9, 11 – 13, 39 – 41, and 79 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner asserts that it is unclear whether Applicant intends to exclude AGIIS complexes isolated from sulfuric acid and calcium salt mixtures or whether Applicant intends to recite a mole ratio of 0 – 0.5 for calcium hydroxide.

Applicants have amended the claims above to specify that the mole ratio of about 0.1 to about 0.5 applies when the AGIIS is isolated from sulfuric acid and calcium hydroxide. Thus, it is not Applicant's intention to exclude AGIIS complexes isolated from sulfuric acid and calcium salt mixtures. In the instances when AGIIS is isolated from sulfuric acid and calcium hydroxide, then the mole ratio of calcium hydroxide to sulfuric acid ranges from about 0.1 to about 0.5. Applicants respectfully assert that, in light of the amendments above, Claims 1, 4 – 9, 11 – 13, 39 – 41, and 79 are not indefinite.

III. Rejections Under 35 U.S.C. §102

A. U.S. Patent No. 4,369,197 to Basel et al., as evidenced by U.S. Patent No. 3,366,490 to Wagner et al.

Claims 1, 4 – 7, 9, and 11 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,369,197 to Basel et al. ("Basel"). Applicants respectfully assert that Basel does not disclose every element of these claims and thus does not anticipate the claimed subject matter.

The Examiner has asserted that Basel inherently forms the recited AGIIS at a pH of less than 2 and at a mole ratio of less than 0.5 of calcium hydroxide to sulfuric acid. Applicants respectfully assert that **the claims require that the AGIIS is isolated** from the mixture of sulfuric acid and calcium compounds. Filtration of the AGIIS is important for the removal of precipitates. See Specification, Page 10, line 21; Page 11, line 6; and Examples 1 – 3.

The Examiner has also asserted that because Applicants use the term "comprising" that the prepared nutriment may contain the reactants in addition to the AGIIS. Applicants respectfully

assert that AGIIS by definition, as recited affirmatively in the claims, is isolated from the mixture. An AGIIS remaining in the mixture with its reactants is not the claimed AGIIS. Thus, if AGIIS is not isolated from the mixture of reactants, the prepared nutriment does not meet the requirements of the claims. Because Basel does not filter or isolate an AGIIS from the mixture, Basel does not disclose every element of the claims.

For these reasons, Basel does not anticipate Claims 1, 4 – 7, 9, and 11.

B. U.S. Patent No. 6,331,514 to Wurzbürger et al.

Claims 1, 4 – 9, and 11 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,331,514 to Wurzbürger et al. (“Wurzbürger ‘514”). The Examiner asserts that an AGIIS made from calcium hydride is the same as an AGIIS made from calcium hydroxide.

Applicant respectfully asserts that Wurzbürger does not disclose the claimed AGIIS. To support this argument, Applicants have submitted simultaneously with this Response a Declaration under 37 C.F.R. §1.132. Although the Declaration does not directly address Wurzbürger ‘514, the Declaration does include at paragraph 18 a chart showing the chemical analyses of four different AGIIS solutions: AGIIS 1.5 N, AGIIS 5 N, AGIIS 27 N, and AGIIS 29 N. As shown in this chart, the sulfate ion concentration for these four AGIIS solutions ranges from about **72,000 ppm to about 1,450,000 ppm**. By contrast, the acidic solution of Wurzbürger ‘514 has “a concentration of sulfate ions of **not more than 2500 ppm**.” See Wurzbürger ‘514, Col. 4, line 60. Thus, Wurzbürger’s solution of sulfuric acid and calcium hydride is clearly different from an AGIIS made from sulfuric acid and calcium hydroxide.

For these reasons, Wurzbürger ‘514 does not anticipate Claims 1, 4 – 9, and 11.

IV. Rejection Under 35 U.S.C. §103(a)

A. U.S. Patent No. 4,369,197 to Basel et al., as evidenced by U.S. Patent No. 3,366,490 to Wagner et al.

Claim 79 stands rejected under 35 U.S.C. §103(a) as unpatentable over Basel, as evidenced by Wagner. The Examiner asserts that it would have been obvious to substitute calcium carbonate or calcium oxide for calcium hydroxide because Basel teaches that these are equivalents.

Applicants respectfully assert that, regardless of what the calcium compounds might be, Basel does not teach or suggest an AGIIS which is isolated from a mixture of sulfuric acid and calcium hydroxide. Basel does not teach filtering the solution, so Basel does not teach the claimed AGIIS.

For these reasons, Claim 79 is patentable over Basel as evidenced by Wagner.

B. U.S. Patent No. 6,331,514 to Wurzburger et al., in view of U.S. Patent No. 5,895,782 to Overton

Claims 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wurzburger '514 in view of U.S. Patent No. 5,895,782 to Overton ("Overton"). The Examiner asserts that Wurzburger '514 teaches a method of contacting a nutriment material with an AGIIS and that Overton teaches AGIIS.

Applicants respectfully assert that **Overton does not teach AGIIS**. Applicants have submitted simultaneously with this Response a Declaration under 37 C.F.R. §1.132. As shown in Experimental Procedures 1 – 6, in paragraphs 4 – 9, solutions were prepared according to the procedures disclosed in Overton. The chemical analyses of these solutions, as well as four AGIIS solutions, are shown in Table 1 in paragraph 18. It is apparent from Table 1 that **the AGIIS solutions differ from the solutions produced in accordance with Overton: (1) pH levels; (2) sulfate ion concentrations; and (3) potassium ion concentrations**. Although the solutions from Experimental Procedures 5 and 6 showed pH values of less than 2, this was likely the result of an incomplete reaction with the calcium metal. None of solutions produced according to Experimental

Procedures 1 – 4 showed a pH level of less than 2. This clearly indicates that the solutions produced according to Overton are not the same as AGIIS and that Overton does not in fact teach AGIIS.

For these reasons, Claims 12 and 13 are patentable over Wurzburger '514 in view of Overton.

C. U.S. Patent No. 6,331,514 to Wurzburger et al., in view of U.S. Patent No. 5,895,782 to Overton and U.S. Patent No. 6,120,822 to Denvir et al.

Claims 39 – 41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wurzburger '514 in view of Overton and U.S. Patent No. 6,120,822 to Denvir et al. ("Denvir"). The Examiner asserts that Wurzburger '514 teaches a method of contacting a nutriment material with an AGIIS, that Overton teaches AGIIS, and that Denvir teaches the step of combining with a dry nutriment.

Applicants respectfully assert that **Overton does not teach AGIIS**. Applicants have submitted simultaneously with this Response a Declaration under 37 C.F.R. §1.132. As shown in Experimental Procedures 1 – 6, in paragraphs 4 – 9, solutions were prepared according to the procedures disclosed in Overton. The chemical analyses of these solutions, as well as four AGIIS solutions, are shown in Table 1 in paragraph 18. It is apparent from Table 1 that **the AGIIS solutions differ from the solutions produced in accordance with Overton in: (1) pH levels; (2) sulfate ion concentrations; and (3) potassium ion concentrations**. Although the solutions from Experimental Procedures 5 and 6 showed pH values of less than 2, this was likely the result of an incomplete reaction with the calcium metal. None of solutions produced according to Experimental Procedures 1 – 4 showed a pH level of less than 2. This clearly indicates that the solutions produced according to Overton are not the same as AGIIS and that Overton does not in fact teach AGIIS.

For these reasons, Claims 39 – 41 are patentable over Wurzburger in view of Overton and Denvir.

V. Conclusion

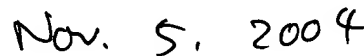
Applicants respectfully submit that, in light of the foregoing comments, Claims 1, 4 – 9, 11 – 13, 39 – 41, and 79 are in condition for allowance. A Notice of Allowance is therefore requested.

If the Examiner has any other matters which pertain to this Application, the Examiner is encouraged to contact the undersigned to resolve these matters by Examiner's Amendment where possible.

Respectfully submitted,



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